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DESCRIPTION OF TWO NEW POCKET MICE AND A NEW WOODRAT FROM NEW MEXICO

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THE University of Michigan-Walker-Harris Expedition of 1927 found in south-central New Mexico the two pocket mice and the woodrat here described. Of the woodrat only an immature individual was secured. In 1928, G. W. Bradt, a member of the expedition, returned to the region and was successful in securing a small series of adult woodrats of the black form, as well as a number of the black pocket mice.

Perognathus gypsi, new species

Type.—Adult male, skin and skull, number 58465, Division of Mammals, Museum of Zoology, University of Michigan; from the White Sands, 12 miles southwest of Alamogordo, Otero County, New Mexico; taken July 12, 1927, by Robert Bradley; original number, 27–173. Two paratypes, from the same locality, are numbered 58464 and 58466.

Diagnosis.—Color much more nearly white than in any other known pocket mouse; under parts pure white; back grayish white; size small.

Coloration.—Entire under parts and lower sides pure white to base of hairs, the white color involving the cheeks and an area about the eyes. Postauricular patch sharply white. Back and sides grayish white. Many of the hairs of the back are provided with blackish tips; subterminally the hairs are white for about half their length; the base of the hair is pale gray, not sharply marked off from the white. Hairs of the back somewhat stiff, but no spines present. Feet and tail whitish.

Skull.—Mastoids more inflated than in *Perognathus f. flavescens* from Kennedy, Nebraska, and slightly less inflated than in *P. apache apache* from Keams Canyon, Arizona. Very similar to *apache* otherwise, but somewhat smaller. Measurements of type skull: condylo-basal length, 19.8 mm.; mastoid breadth, 12.4 mm.; interorbital constriction, 5.2 mm.; length of nasal, 8.3 mm.

Body measurements.—Type, male; and paratypes, females, numbers 58464 and 58466: length, 118, 118, 120 mm.; tail, 57, 59, 61 mm.; hind foot, 17, 17, 18 mm.; ear from notch, 6.0, 6.5, 6.5 mm.; weight, 8.5, 7.7, 7.0 grams.

Distribution.—Known only from the White Sands of Otero County, New Mexico. Its nearly white color seems to be correlated with the color of these very white sands, which are composed of nearly pure gypsum.

Relationships.—This mouse belongs to the subgenus *Perognathus* and evidently to the *fasciatus* group. Its nearest relative seems to be *Perognathus apache* from Arizona, but it differs from that species in the lesser inflation of its mastoids, as well as in body proportions.

Perognathus intermedius ater, new subspecies

Type.—Adult male, skin and body skeleton, number 58474, Division of Mammals, Museum of Zoology, University of Michigan; from Malpais Spring, Otero County, 15 miles west

of Three Rivers, New Mexico; taken July 17, 1927, by Lee R. Dice; original number, 27–257. Paratypes: numbers 58472, female, and 58475, male, from the same locality as the type.

Diagnosis.—Body proportions and skull characters like *Perognathus intermedius intermedius,* but upper parts nearly black in color.

Coloration of type.—Sides light mouse gray of Ridgway, the hairs nearly uniform in color to their bases; back dark fuscous, gradually shading into color of sides. The hairs of the back are light mouse gray in most of their concealed portion. Chest, throat, chin, and spot under the nose white slightly tinged with buff. This white area involves the front legs and feet and extends backward in more or less irregular spots over the middle of the belly. Tail and hind feet dark fuscous.

Measurements.—Type male, and paratype no. 58472, female: length, 167, 171 mm.; tail, 86, 100 mm.; hind foot, 20, 20 mm.; ear from notch, 8.0, 7.5 mm.; weight, 14.3, 12.5 grams. Skull of type: condylo-basal length, 21.4 mm.; mastoid breadth, 12.3 mm.; interorbital constriction, 6.3 mm.; length of nasal, 9.6 mm.

Distribution.—Additional specimens of this subspecies have been taken by G. W. Bradt near Carrizozo, Lincoln County. So far it has been found only on the black lava Malpais, and its color would seem to have some relation to the prevailing black background of its habitat.

Relationships.—This black mouse is evidently closely related to *Perognathus intermedius intermedius,* which is found in rocky situations in the same region.

Neotoma albigula melas, new subspecies

Type.—Adult male, skin only, number 59337, Division of Mammals, Museum of Zoology, University of Michigan; from the Malpais lava beds near Carrizozo, Lincoln County, New Mexico; taken July 27, 1928, by G. W. Bradt; original number, 1.

The skull of the type and those of two paratypes, numbers 59338 and 59339, became mixed in the field, and these skulls are now numbered 59340, 59341, 59342. Two other paratypes, numbers 59335 and 59336, are accompanied by skulls, but both are immature.

Diagnosis.—Similar to *Neotoma albigula albigula* but upper parts very dark in color, almost black.

Coloration of type.—Sides and most of under parts gray slightly tinged with brown, nearest mouse gray of Ridgway, the hairs blackish at their bases; back almost black, nearest blackish mouse gray of Ridgway, the color continuing to the bases of the hairs. A white patch covers the upper chest, throat, and chin, the hairs white to their bases; this patch varies somewhat in extent among the paratypes. Front feet white to the wrist, and a broken white line extends up the back side of the fore leg. Hind feet white a little more than half way to the heel; on the outer side of the foot the white reaches the heel. Upper side of tail like back, under side slightly paler.

Skull.—Like that of *Neotoma albigula albigula.*

Measurements of type.—Length, 282 mm.; tail 120 mm.; hind foot, 34 mm.; ear from notch, 26 mm.; weight, 153 grams.

Distribution.—In addition to the type series from Carrizozo, New Mexico, we have one immature specimen from Malpais Spring, Otero County, 15 miles west of Three Rivers. All the specimens are from the black Malpais lava.

Relationships.—This black woodrat is evidently closely related to *N. a. albigula,* which occurs in rocky places throughout the region. Goldman[1] mentions darker specimens of *albigula* from Rio Puerco and San Rafael, New Mexico, but these specimens are by no means as dark as the ones here described. The same author[2] also notes darker individuals of *Neotoma desertorum* associated with lava beds.

[1] U. S. Dept. Agric., N. Amer. Fauna, No. 31, p. 32, 1910.

[2] *Op. cit.,* p. 77.